

CLAIMS

Patent claims

1. (Currently Amended) A filter ~~Filter~~ cartridge (1) with a filter material ~~containing~~ comprising a cartridge container (6) with bottom wall (2) and peripheral wall (3) and with a lid (10), which durably shuts the cartridge container (6), comprised of a lid bottom (11) and a strip-shaped lateral wall (16), with a form matching according to its border, which is fitted at the inner side of the peripheral wall (3), ~~characterized in~~ whereby that the lid bottom (11) merges with the lateral wall (16) in the direction of the peripheral wall (3) along an inward curved edge section (14), whereby the curved edge section (14) and the ~~strip-shaped~~ lateral wall (16) join in a common wall section (15), tapering inwards, in the area with the matching form.
2. (Currently Amended) The filter ~~Filter~~ cartridge as claimed in claim 1, ~~characterized in that~~ wherein the lateral wall (16) is connected with the curved edge section (14) tangentially.
3. (Currently Amended) The filter ~~Filter~~ cartridge as claimed in claim 1 ~~or 2~~, ~~characterized in that~~ wherein the common wall section (15) forms the lower wall section (18) of the lateral wall (16).
4. (Currently Amended) The filter ~~Filter~~ cartridge according to ~~one of the~~ claims claim 1 to 3, ~~characterized in that~~ wherein the curved edge section (14) extends up to the inner end of the strip-shaped lateral wall (16).
5. (Currently Amended) The filter ~~Filter~~ cartridge according to ~~one of the~~ claims claim 1 to 4, ~~characterized in that~~ wherein the curved edge section (14) has a mean edge radius of curvature R , which satisfies $R \geq 5 \times S$, whereby S indicates the thickness of the peripheral wall (3) of the cartridge container (6).

6. (Currently Amended) The filter ~~Filter~~ cartridge according to ~~one of the~~ claims claim 1 to 5, ~~characterized in that~~ wherein the curved edge section (14) spans an angle α from 80° to 100°.
7. (Currently Amended) The filter ~~Filter~~ cartridge according to ~~one of the~~ claims claim 1 to 6, ~~characterized in that~~ wherein the side lateral wall (16) has an upper wall section (17), which extends upward from the common wall section (15) at least up to height of the lid bottom (11).
8. (Currently Amended) The filter ~~Filter~~ cartridge according to claim 7, ~~characterized in that~~ wherein the upper wall section (17) of the side lateral wall (16) and the curved edge section (14) border on their outer side with a ring space (5) with a wedge-shaped cross section.
9. (Currently Amended) The filter ~~Filter~~ cartridge according to ~~one of the~~ claims claim 1 to 8, ~~characterized in that~~ further comprising a back-up ring (20) is arranged ~~in~~ on the lid (10).
10. (Currently Amended) The filter ~~Filter~~ cartridge according to claim 9, ~~characterized in that~~ wherein at least the bottom contour of the back-up ring (20) is built such that it is complementary to the outer contour of the lid (10).
11. (Currently Amended) The filter ~~Filter~~ cartridge according to ~~one of the~~ claims claim 9 or 10, ~~characterized in that~~ wherein the back-up ring (20) does not fill the wedge-shaped ring area (5) completely.

12. (Currently Amended) The filter ~~Filter~~ cartridge according to ~~one of the~~ claims claim 9 to 11, ~~characterized in that~~ further comprising a slit-shaped recess 30 between the back-up ring (20) and a position ~~one of the common wall~~ sections (14') of the curved edge section (14) bordering on the common wall section (15)[,] ~~there is a slit-shaped recess (30)~~.
13. (Currently Amended) The filter ~~Filter~~ cartridge according to ~~one of the~~ claims claim 1 to 12, ~~characterized in that~~ wherein at least one section (19) of the common wall section (15) is laser welded with the peripheral wall (3) [.]
14. (Currently Amended) The filter ~~Filter~~ cartridge according to the claim 13, ~~characterized in that~~ wherein the section (19) is glued or butt-welded with the peripheral wall (3).
15. (Currently Amended) The filter ~~Filter~~ cartridge according to ~~one of the~~ claims claim 1 or 14, ~~characterized in that~~ wherein the material of the cartridge container (6) is transparent to laser light and at least the material of the lateral wall (16) of the lid (10) is absorptive to laser light.
16. (New) The filter cartridge as claimed in claim 2, wherein the common wall section (15) forms the lower wall section (18) of the lateral wall (16).
17. (New) The filter cartridge according to claim 16, wherein the curved edge section (14) has a mean edge radius of curvature R , which satisfies $R \geq 5 \times S$, whereby S indicates the thickness of the peripheral wall (3) of the cartridge container (6).
18. (New) The filter cartridge according to claim 6, wherein the ~~side~~ lateral wall (16) has an upper wall section (17), which extends upward from the common wall section (15) at least up to height of the lid bottom (11).

19. (New) The filter cartridge according to claim 8; further comprising a back-up ring (20) arranged ~~in~~ on the lid (10).

20. (New) The filter cartridge according to claim 12, wherein at least one section (19) of the common wall section (15) is laser welded with the peripheral wall (3).